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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,172	02/27/2004	Shin-ichi Uehara	Q80096	4907

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EXAMINER

FINEMAN, LEE A

ART UNIT	PAPER NUMBER
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2872

NOTIFICATION DATE	DELIVERY MODE
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03/01/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/787,172	Applicant(s) UEHARA ET AL.	
	Examiner LEE FINEMAN	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 February 2011 has been entered in which claims 1 and 3-5 were amended. Claims 1 and 3-5 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imai, US 5,930,037 in view of Aoki et al., US 5,831,585 (henceforth Aoki) or Hirai et al., US 5,074,644 (henceforth Hirai).

Imai discloses in fig. 3 an image display device (101) comprising: a display panel (102) which has a plurality of pixel sections (L, R) each of which includes at least a pixel displaying an image for the first viewpoint (L) and a pixel displaying an image for the second viewpoint (R), said pixel sections being provided periodically in one direction (fig. 3), and said display panel

Art Unit: 2872

comprising an image surface on which the plurality of pixels are displayed (fig. 3) and having an image display area which is rectangular (see figs. 3 and 4); an optical unit (103) which refracts the light emitted from said pixels and emits the light in directions different from each other (fig. 3), and an adhesive layer (column 5, lines 39-42) affixes the optical unit (103) directly on the image surface of the display panel on which the plurality of pixels are displayed (fig. 3), which is provided on said display panel (103) to fix the optical unit and the display panel (column 5, lines 39-44), wherein the display panel (102) and optical unit (103) are aligned so that light emitted from the pixel displaying an image for the first view point is refracted and emitted by a specific region of the optical unit to arrive at said first view point; and wherein said optical unit is a lenticular lens (103) having a plurality of semicylindrical lenses (fig. 3), a longitudinal direction of which is perpendicular to said one direction (fig. 3); and said adhesive layer intervenes between said optical unit and said display panel (column 5, lines 39-42). Imai discloses the claimed invention except for explicitly stating wherein the adhesive layer is provided on a part of an area enclosing an image display area of said display panel, said part of said area consisting of two linear areas extending along one of two pairs of opposed edges that define the rectangular display area and the direction in which said part of said area in which the adhesive layer is provided extends, corresponds with the longitudinal direction of said semicylindrical lens or a direction orthogonal with the longitudinal direction of said semicylindrical lens. Aoki or Hirai teach (see fig. 5 of Aoki or fig. 2 and column 2, lines 60-62 of Hirai) that it is extremely well known to use attach an optical unit (101, Aoki or 2b, Hirai) directly to a panel (102, Aoki or 2a, Hirai) via an adhesive layer (103, Aoki or column 2, lines 60-62 of Hirai) wherein the adhesive layer is provided on a part of an area enclosing an image display area of said panel (see fig. 5 of

Art Unit: 2872

Aoki or fig. 2 and column 2, lines 60-62 of Hirai), said part of said area consisting of two linear areas extending along one of two pairs of opposed edges that define the rectangular display area (see fig. 5 of Aoki or fig. 2 of Hirai). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the adhesive layer as taught by Aoki or Hirai between the optical unit and display panel on either of the two pairs of opposed edges to effectively attach the optical unit and panel and save money by using less adhesive. Therefore direction of the adhesive layer would correspond with the longitudinal direction of said semicylindrical lens or a direction orthogonal with the longitudinal direction of said semicylindrical lens.

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imai in view of Aoki or Hirai as applied to claim 1 above and further in view of Eichenlaub, US 5,410,345.

Imai in view of Aoki as applied to claim 1 above discloses the claimed invention except wherein the optical unit is a fly-eye lens having a plurality of convex lenses in which a lens pitch in said one direction and the lens pitch in a direction perpendicular to said one direction are equal to each other. Eichenlaub teaches in fig. 13 that fly-eye lenses (178) with the lens pitch in said one direction and the lens pitch in a direction perpendicular to said one direction are equal to each other are a well known lens array in the stereoscopic art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a fly-eye lens with the lens pitch in said one direction and the lens pitch in a direction perpendicular to said one direction are equal to each other as taught by Eichenlaub in the system of Imai in view of Aoki as they are

Art Unit: 2872

commonly available and easy to obtain type of lens array. Therefore direction of the adhesive layer would correspond with the longitudinal direction of said convex lens or a direction orthogonal with the longitudinal direction of said convex lens.

Response to Arguments

5. Applicant's arguments with respect to claims 1 and 3-5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEE FINEMAN whose telephone number is (571)272-2313. The examiner can normally be reached on Monday - Friday 8:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2872

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lee Fineman/

Primary Examiner, Art Unit 2872

24 February 2011